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November 8, 1996

Project Number 5278

Mr. James Shafer
Remedial Project Manager
Northern Division, Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, Pennsylvania 19113

Reference: CLEAN Contract No. N62472-90-D-1298
Contract Task Order 218

Subject: RAB Meeting Minutes

Dear Mr. Shafer:

Enclosed is a copy of the November 8, 1996 RAB meeting minutes.

If you have any questions about this matter, please contact me at 508-658-7899.

Very truly yours,

Betsy Horne
Community Relations Specialist

BH:ib

Enclosure

c: Dr. D. K. Abbass
Mr. Alfred Arruda, Jr.
Mr. Robert Belenger
Ms. Elizabeth Bermender
Ms. Mary A. Blake
Dr. David W. Brown
Mr. Paul M. Cormier
Mr. Anthony D'Agnenica

c: Mr. Francis J. Flanagan
Hon. June Gibbs
Mr. Dennis F. Klodner
Mr. Joseph McEnness
Mr. Howard L. Porter
Mr. Paul D. Russell
Mr. Charles Salmond
Mr. Keith Stokes
Mr. John Torgan
Ms. Claudette Weissinger
Mr. Paul Kulpa, DEM
Ms. Kymberlee Keckler, EPA
Ms. Sarah White, EPA
Mr. Rayomand Bhumgara, Gannett Fleming
Mr. Tim Prior, USF&WS
Mr. Ken Finkelstein, NOAA
Capt. Wyman, NETC
Mr. David Sanders, NETC
Mr. Brad Wheeler, NETC
Capt. Bogle, NETC
Mr. James Barden
Hon. Paul W. Crowley
Ms. Mary Philcox
Mr. Stephen J. Zeitz
Councilman Dennis McCoy
Mr. Vincent Arnold
Captain Norman Pattarozzi
Dr. David Kim
Sister Annie Marie Walsh
Brother Joseph
Newport Public Library
Middletown Free Library
Portsmouth Free Public Library
R. Boucher, NORTHDIV (letter only)
Mr. John Trepanowski, B&RE, Wayne
Ms. Meg Price, B&RE, Wayne (letter only)
Mr. Liyang Chu, B&RE, Wilmington
File 5278-3.2 w/o enc./9.4 w/enc.

NAVAL EDUCATION AND TRAINING CENTER
RESTORATION ADVISORY BOARD MEETING
OCTOBER 16, 1996

MINUTES

On Wednesday, October 16, 1996, the NETC Newport Installation Restoration Program Restoration Advisory Board (RAB) gathered at the NETC Officers' Club for its monthly meeting. The meeting began at 7:08 pm and ended at 8:55 pm.

Eleven of the 17 RAB community members attended: Kathy Abbass, Al Arruda, Liz Bermender, Mary Blake, David Brown, Tony D'Agnenica, Joe McEnness, June Gibbs, Howard Porter, Paul Russell, and Claudette Weissinger. Also attending were: Paul Kulpa, the RIDEM Remedial Project Manager; Kymberlee Keckler, EPA Remedial Project Manager and Susan Svirsky, EPA Ecological Risk Assessor; Captain Jon Wyman, NETC Navy Co-chair; and Jim Shafer, NORTHDIV Remedial Project Manager. Other personnel attending included: David Sanders, NETC Public Affairs Officer; and Brad Wheeler and Ray Roberge, NETC Environmental Affairs. Community members who provided notice of their absence included: Bob Belenger, Frank Flanagan, Dennis Klodner, Chuck Salmond, Keith Stokes, and John Torgan.

Agenda items are denoted in the minutes by the underscored headings.

CALL TO ORDER

Captain Jon Wyman, the Navy Co-Chair, called the meeting to order and welcomed everyone. He also introduced Paul Cormier, a new RAB member. Paul retired from NUWC as its safety director.

PREVIOUS MINUTES

Since no calls were received concerning the final minutes, a motion was made to accept them. The motion was seconded and approved.

COMMITTEE REPORTS

Each committee chair reported:

Membership Committee Chair, Paul Russell, asked if the potential new members who had been invited to attend were in the audience: Dan Kerr, Gerry Gordon, and Mike Foley. None responded.

Planning Committee Chair, David Brown, had nothing to report.

Project Committee is chairless. This will be addressed under Unfinished Business.

Public Information Committee, chaired by June Gibbs, has not met. More information on this committee will be addressed under New Business.

UNFINISHED BUSINESS

Captain Wyman requested nominations for the Project Committee chair. When none was offered, Joe McEnness suggested that until a community member indicated an interest in the position, Ray Roberge could be the temporary chair. Ray has been with the Environmental Department for a year and a half; previously he was an industrial hygienist at the Naval Hospital. Ray's nomination was seconded and approved.

Jim Shafer reviewed the new project schedule handout. The change to the McAllister Landfill schedule was triggered by advancing the date for submission of a technical memorandum by approximately seven weeks (ID 16). All following dates therefore advance as well.

A decision has been made to remediate the Melville North Landfill according to Rhode Island requirements (as opposed to CERCLA) because the site is not on EPA's National Priorities List. Field work should begin late this month, with a report recommending a remedy to be issued in late spring 1997. Design work should commence before the end of the fiscal year (September 30, 1997). State requirements are as stringent as EPA's but only one report that contains all the information about the site needs to be issued, so significant time will be saved.

A records search at Old Fire Fighter Training Area revealed underground storage tanks and utility lines. Although the approach has not been discussed with EPA or the state, the Navy wants to determine this fall if the tanks are still underground; if so, a removal or interim remedial action could be undertaken this fiscal year. Even in this eventuality, the long-term overall site investigation will proceed.

Coddington Cove Rubble Fill and NUWC Disposal Area have been added to the Gould Island schedule. If a work plan for each site can be developed, the Navy will be prepared to move ahead with work on them when remediation money becomes available.

The meeting to discuss comments on the Derecktor Shipyard Ecological Risk Assessment (ID 104) was held today. It was very useful.

A revised RAB Review Dates Calendar is attached to the schedules. The next document issued for RAB review will be the draft final Derecktor Shipyard ERA on December 31.

NEW BUSINESS

Brad Wheeler covered the following new business:

- The McAllister Landfill cap is complete. We will set a date for a ribbon cutting event.

- The Public Information Committee will be scheduling a meeting with the Navy to identify committee goals and procedures. Members availability appears flexible. June will contact Chuck Salmond to determine his schedule.

- The RAB voted to skip the December meeting because of the holidays.

PRESENTATION

Susan Svirsky used the "Candyland" or "Chutes and Ladders" graphic to remind the RAB of her pr sentation last spring about how ecological risk assessments are conducted. She introduced the presentation on the draft ERA for Derecktor Shipyard by noting that a meeting had occurred that afternoon on the substance of the draft report. Greg Tracey will describe what the investigation found. What it means will be determined later once the report is finalized.

Greg used a series of overhead graphics (handouts) to supplement his presentation. He has lived in Rhode Island for 18 years, having been raised in Michigan. Before joining SAIC, Greg worked at Woods Hole, earned his doctorate in biological physiology at URI's Oceanography School, and worked at EPA's Narragansett Laboratory. He also described the other members of the ERA's investigative team.

The objective of the investigation is to assess risk resulting from previous activities at Derecktor Shipyard and develop a report describing the findings that is understandable to the public. An overhead of the study area included the locations of the background, or reference stations, at Castle Hill Cove and Jamestown Potter Cove.

The study identified a variety of habitats and receptors of concern: pelagic dwellers, which live in the water column; epibenthic creatures, which live on sediment; infaunal animals, which live in sediment; and the avian aquatic community (predatory birds that feed on contaminated species). Different types of receptors were chosen for each habitat type, based on economic impact (fishing sector), and abundance of receptor-specific information such that they can serve as surrogates for other creatures about which less is known.

Another overhead depicted contaminant behavior. The study assesses how chemicals get to the receptors of concern. The team suspects that chemicals from a variety of sources mix with Coddington Cove sediment and become resuspended. The contaminants of concern, or stressors, on the receptors include nutrients (from the Newport sewage treatment plant), as well as metals, PCBs, and PAHs (oil based compounds) from Derecktor.

The team conducted a variety of measurements using water, biota, and sediment to determine if effects occur on the receptors. This information is used to build a weight-of-evidence approach, that is, if receptors are exposed to various chemicals, what is the magnitude of that exposure and what effect do they have on the receptor. If there is high exposure and a high effect, then a probability of risk exists. If a low chemical exposure is determined and the receptors are healthy, there is probably not a risk. The difficulty in assessing risk is in situations where the correlation is not direct.

An overhead showed the locations of the study sampling stations. A final graphic presented the preliminary risk characterization summary. The relationship between the minus signs and the plus signs determines the overall relative risk ranking.

Both Chuck Salmond, who could not be present, and Kathy Abbass submitted written comments. Kathy read hers. Brad paraphrased Chuck's. A summary of Chuck's comments and the responses given are presented below:

Comment: The executive summary is too technical. It should be simplified.

Response: From now on, the community members will be provided with the executive summary, the conclusions, and a fact sheet for each complex document.

Executive summaries will also be shorter and more concise.

Comment: The Newport sewage treatment plant should be investigated.

Response: The study was designed to address the plant. More concern existed about the nutrients in the plant's effluent than from chemicals. Nutrients can trigger algal blooms that reduce the amount of oxygen available to area creatures. The plant treats from 8 to 11 million gallons per day; its outfall is located just off Coddington Point.

Comment: Risk levels should be defined.

Response: Susan stated that that would be hard to do because we are still at the characterization stage.

Both sets of comments are appended to these minutes.

Comment: How were reference sites selected?

Response: The two reference sites are areas that are not effected by Derecktor and which contain similar habitats and sediment characteristics as Derecktor.

Comment: Why was no plant life included in the things the investigation studied?

Response: The study needed to match endpoints to site conditions and Coddington Cove does not contain much vegetation. For the study to be useful, we identified habitats and receptors that could be readily collected and measured.

Comment: Do you compare what you find against a standard?

Response: Yes. "Benchmarks" are criteria used for this comparison. Benchmarks are defined by the government and scientific communities as concentrations at which effects are expected to occur.

Comment: I'm not sure what the purpose of the ERA is. Is it eventually to protect humans or to prevent this situation from recurring in the future?

Response: A human health risk assessment will be conducted later. If the source areas of contamination are cleaned up, the risk to people will be reduced.

Comment: The draft report indicated that there was a counter-clockwise flow. Does that indicate that contaminated sediments would be found north of the piers?

Response: One of the characteristics measured indicated this flow pattern, however, Narragansett Bay wind patterns have a large effect on currents and scouring.

Settling could occur north of the piers, but not all of the contaminants would end up there.

Comment: Do the piers at D recktor effect the water flow pattern?

Response: Yes, some. A box model, which measures currents, indicates some slowing does occur.

Comment: Does the risk characterization summary overhead depict current conditions? If conditions are altered, does the risk assessment change considerably?

Response: Most of the study data was collected during the summer of 1995. We try to predict winter effects from that information. Should a proposal to alter the existing use of the shipyard arise, the ERA would provide a good baseline against which to evaluate that future use.

Comment: How long ago did the shipyard actually close down operations? If you had sampled then, would the contaminant readings be higher?

Response: Operations ceased in 1991, approximately 5 years ago. Because sediments tend to settle on the bottom of the cove in layers (deposition), the sediment at the surface now may be much cleaner than sediment below the surface. That is why samples were cored down approximately 1 foot to ensure measuring Derecktor-generated contaminants.

Comment: Although sample stations 29 and 41 are physically adjacent, why do they have very different ratings on the risk characterization summary.

Response: The short, shaded protrusion depicted between them on the diagram is not a pier but a solid barrier.

Comment: What is the rate of sedimentation in the area?

Response: The average is approximately 1 inch every 10 years.

Comment: Can you identify the size of the high risk sites?

Response: We do have some idea of their extent. Since conducting chemistry analysis is very expensive, we tried to take as many grab samples as possible. Depending on whether the samples contain sand or silt, one can estimate the size of the area. No extrapolation is necessary.

Comment: Can you point out the high risk areas?

Response: The highest relative risk appears to be at stations 27, 28, and 29.

Comment: Why is the highest risk on the south side of the barrier?

Response: Lots of PCBs have accumulated in the sediment in those locations resulting from machine tool cutting wastes.

Comment: Sampling stations 24 and 35, on the southern end of Coddington Cove, both read only slight risks. Is this because of the current flow pattern in Coddington Cove?

Response: The current flow pattern in Coddington Cove is always counter-clockwise, from south to north, no matter what the tide. In addition, these areas are in the lee of the wind, which may have some effect. Finally, other stations are in areas of the shoreline where lots of activity took place. That is not the case near stations 24 and 35. Susan also mentioned that these rankings are still preliminary and that EPA, the state, and the Navy are continuing to discuss what they mean.

Comment: Is the sediment deposited by a centrifugal effect?

Response: No, the softer sediment is along the shoreline. The closer to the shore, the slower the water flow. When water slows, sediments slowly drop to the cove's surface (deposition). We do not characterize this as centrifugal force.

Comment: At sampling station 29, is there the potential of catching sediments from outside the cove?

Response: Yes, physically that is a possibility but the nature of the contaminants suggests that they are shipyard related.

Comment: Are the locations of the outfall pipes near the highest offshore risk areas?

Response: Yes. Many outfalls exists, but the primary outfalls from the shipyard correlate approximately with locations where higher chemical concentrations were found. This will be addressed in the SASE report, due to be issued in January 1997.

Comment: Is there a way these investigations can be streamlined? Can one species be used to make assumptions about another receptor?

Response: We are learning lots about how chemicals get into animals; all behave about the same, so in the future we won't have to take so many samples. Also, in toxicity testing, we can often predict if a chemical is toxic so we will not need to run so many tests. Susan reminded the RAB, however, that not much is known about contaminants like tri-butyl-tin (a ship anti-fouling compound no longer used in the United States). As new information is received, methodologies are changed.

Comment: Is there any flexibility in EPA and state methodologies?

Response: Susan responded that EPA stays very close to the edge of the wave of new information. Part of the problem is that scarce R&D funding is being sought by a myriad of sources. EPA needs more information on such things as what effect X ppb means for Y receptor.

Comment: Are the local environmental advocacy groups insisting on redundancies? Should the RAB lobby them to stop?

Response: Susan stated that at NETC there are no interest groups asking for information that is not relevant.

Comment: At Station 36, there is a low exposure rate but a high tissue residue effect. Do you have any idea why?

Response: The residue is from copper. We don't know much about the effect of copper in lobsters but they may take up more copper than other receptors. Another possibility is that a ship docked along the breakwater may have released a significant amount of copper years ago.

Comment: When you discuss tissue residue effects, what does that mean for people?

Response: A level of a chemical in tissue based on benchmark values should be a problem to the receptor. However, copper is not a problem for humans. Susan reminded the RAB that a human health risk assessment has yet to be conducted.

Comment: Could the sewage treatment plant be the source of some of the chemicals you have found?

Response: Contaminants found near the shipyard appear to be specific to the site. Most chemicals were probably dumped, not transported, which eliminates the sewage treatment plant as a source.

Comment: Could the chemicals the plant uses on its effluent be contributing to the contamination or be creating side effects? They used to use potassium permangenate. You should do some research on what used to be discharged before it was regulated.

Response: We will find out the history of their use and get back to you.

Comment: A series of questions were asked about defining the risks or prioritizing the sites based on the ERA results.

Response: In one case it is too early to do so; EPA, the state, and the Navy are still assessing what the information means. In the other case, it would be like

comparing apples and oranges. Susan suggested that a graphic that will be part of the final draft should help to clarify these issues.

Comment: Is receptor mobility taken into consideration?

Response: Yes, it is when species for investigation are selected. Bivalve shellfish don't go far, and cunner don't range widely. Although lobsters are mobile, because of their overall economic importance, they cannot be eliminated from investigation.

Comment: What is the next step, now that the draft ERA is being reviewed?

Response: Jim Shafer indicated that the draft final ERA would be issued on December 30, which begins a 30 day review period. Although the process may have seemed long, the extent of this ERA has been a year and a half, a relatively short span where ERAs are concerned.

Comment: How does the ERA relate to the on-shore effort?

Response: The draft SASE due early in 1997 will blend the two locations.

Comment: Brad requested that Kymberlee Keckler describe the purpose of the feasibility study, which may be the next step that follows the SASE.

Response: Kymberlee explained that a feasibility study evaluates alternative cleanup approaches to help us determine how to deal with risk. Susan's risk presentation last spring included a discussion of the nine criteria EPA uses to evaluate alternatives.

Comment: At what stage is it most critical for the RAB to help identify a site's future use?

Response: Paul Kulpa stated that the state will look at possible future uses but now is the time for the RAB to help identify future uses. Brad Wheeler reminded the RAB that the property still belongs to the Navy and that any decision about Derecktor Shipyard's use will be the Navy's decision.

Comment: When will the Navy know what, if anything, it will do with Derecktor?

Response: Captain Wyman suggested that no one has an answer to that question. It is a prime piece of property; he cannot envision any reason the Navy would want to excise it.

Comment: What would happen to the site if the Navy were to decide to bring the fleet back?

Response: Captain Wyman stated that the National Environmental Policy Act (NEPA) process would be completed before any decision was made. Brad mentioned that this comprehensive environmental impact statement process was applied to federal facilities by an executive order. Federal facilities are now fully subject to NEPA requirements. Right of sovereignty is no longer available to military bases.

NEXT RAB MEETING

The next RAB meeting is scheduled for Wednesday, November 20. The agenda includes:

- Completing the discussion on the draft ERAs for Derecktor Shipyard and McAllister Landfill
- Hearing a presentation on the Melville North Landfill Work Plan
- Hearing an update by the Public Affairs Committee

October 3 1996
Chuck Salmond 848-2554

Review Comments of the Derecktor Shipyard Marine Ecological Risk Assessment

Executive Summary

The executive summary is confusing to the point of misleading. An executive summary should be a highlight of the findings written in plain English. A good executive summary is laid out with project background, summary of processes used in the study and results of those findings - not a litany of every step in the study with uncertainty and unknowns to confound and confuse the layman. Those areas are important to the study but should be addressed within the body of the report. As a reader, I want to know the results.

Recommendations: The executive summary should be completely re-done, detail removed and content reduced to about 5-10 pages in this instance.

Two charts should be added. (1) Chart shows sample and study areas. (2) Chart shows the risk results and the probable causes of pollution.

Provide conclusion. End chapter is titled "Summary and Conclusions" but no conclusions are given!

Study Results

Basic study is flawed. The fact that the sewer outfall for the entire island is in the study area is not adequately addressed. Most of the study results as stated are more consistent with the outfall of the Newport POTW than the study subject! The fact that a circular flow present in Coddington Cove could tend to disperse heavier pollutants associated with the sewer outfall to areas along the shoreline and that station 33 is in the center of the tidal vortex and what impacts these cause need to be addressed

Recommendation :

(1) The Newport Sewer outfall should be assumed as a pollution site.

(2) Perform like study tests in the area with the outfall as the origin. If tests show gradient it would confirm or refute the premise that the outfall is a source.

Summary and Conclusions

The conclusion sections contain excellent data and to a point good analysis.

Severe Risks. There are none so plainly state this.

Moderate Risks There appear to be none. Although there are stress indicators, the author is unable to assess the cause and attribute it to Derecktor Activities.

Slight/Moderate Most of these appear due to Newport sewer outfall. Needs more analysis.

Slight Risks As stated in the report, localized hypoxia is due to water flow and sewage related activities. They are not a result of Derecktor and if cause is elsewhere, should be so stated.

Overall

The report has outstanding data and there is no reason to refute that data. The analysis of that data certainly appears thorough and complete; however, the conclusions are a little cloudy. The risk analysis indicates there are impacts due to the shipyard activities; but what are they? A summary chart that indicates pollutants, possible sources, and the impacts, severe, moderate, etc. would be most helpful. Close reading reveals that impacts due to Derecktor are slight if any at all.

Review Comments of the McAllister Point Landfill Ecological Risk Assessment

Overall : The report is somewhat difficult to read due to the complex nature of the material. The use of charts is most helpful especially table 7.1-1 which tells the whole story. Recommended improvements is the addition of estimated source of contamination into table 7.1-1 and an overall map of the study site overlaid with the EEZ risk. This is the only way to place the data into proper perspective. This summary would show that over the vast majority of the study area the risk is slight and what contamination present is not due to the old landfill. It could further show the areas due to landfill contamination so that any future review could focus on that area.

COMMENTS ON THE DRAFT
DERECKTOR SHIPYARD MARINE ECOLOGICAL RISK ASSESSMENT REPORT
Presented to the RAB by
D. K. Abbass, Ph.D. October 16, 1996

Note: I in no way challenge the integrity of the scientific method or the results described in this report. My comments are those of an interested colleague and citizen.

General

There is no chart of water depths in the cove.

The Executive Summary should include a map of the area indicating the sample site locations. There is plenty of this information in the documentation section but a very simple map is necessary for those who may read only the Executive Summary.

There is no explanation of why the sample site locations were chosen.

There is no historical background given for the cove or for the drainage inland. Other uses of the nearby land may have contributed to the pollution in Coddington Cove, i.e., the nearby railroad, a public works storage, the newly constructed bus station, and other sources of pollution in the drainage.

p. 4-10 "Coddington Cove has no major fresh water source..." This is inaccurate. Based on historical maps of the area, there was a stream with an extensive wetland and ponds entering the southeast corner. The drainage extends to Tonomy Hill on the south and follows to the north the curve of the hill surrounding the cove. See:

Nebenzahl, Kenneth
1974 Atlas of the American Revolution. New York, Rand McNally. Map 31.
Marshall, Douglas W. & Howard H. Peckham
1976 Campaigns of the American Revolution: At Atlas of Manuscript Maps. Ann Arbor, University of Michigan Press. Fage Map of Rhode Island (Aquidneck); also detail map p. 71
Newport, City of
1921 Map of the City of Newport.

Although there may be no obvious outlet for this drainage today, the runoff must be going somewhere. The RAB document clearly states that the data from onshore investigations were not yet fully available. (p. 1-30) Perhaps when this is completed, the inland influences may become apparent.

Note that Bob Derecktor was convicted of burying environmental hazards on his home property. It would be wise to assume that he may have done so on the shore of Coddington Cove as well.

p. 1-30 "The existence of significantly elevated CoCs in Coddington Cove subsurface sediment layers relative to surface sediments may represent an increased risk for indigenous biota should resuspension of these buried sediments occur." Does this mean that there may not be future dredging? What about prop wash from Navy and other ships disturbing the sediment?

p. 4-15 How did the installation of the breakwater change the overall pattern of circulation of sediments. I assume that the increased sedimentation in certain areas would cover bottom features, including contaminated sediments. Note that this is exactly what happened at Melville when the fueling dock was built; an historic shipwreck to the north of the dock has been almost completely covered.

I am bothered by the fact that the comparison sites are chosen because they are relatively "clean"; and even these are somewhat contaminated. Modern boat and ship construction can be a nasty business. I believe that comparison with other shipyards would indicate that Coddington Cove merely shows the typically nasty deposits coming from the shipbuilding industry. It is proper the the Navy is cleaning up the Cove, but there are many other locations around Narragansett Bay that should be investigated.

Note: In 1778 the British Frigate JUNO was run aground and burned in Coddington Cove. There has to date been no professional archaeological attempt to locate the remains of this Revolutionary War vessel. Note that the JUNO, if she is ever found, would be entitled to protection under federal and state laws.

Typographical/Grammatical Errors:

p. 1-30 Paragraph 3, line 5: "data from onshore investigations were not yet fully available".

p. 3-12 Second paragraph from the bottom, line 3: Start sentence with cap C.

Table 3.1-2. Note 3: Start with cap T.

p. 7-7 Last paragraph, last sentence: "effects" should be "affects". This sentence is so grammatically convoluted that its meaning is not clear.

p. 8-8: Check with someone who knows German but there should be caps on the nouns and at the beginning of the reference.

p. 8-14: There are two titles for Quinn, et al., 1994 and 1994b.